# **Complete Summary**

## **GUIDELINE TITLE**

Antiepileptic drugs guideline for chronic pain.

## BIBLIOGRAPHIC SOURCE(S)

Washington State Department of Labor and Industries. Antiepileptic drugs guideline for chronic pain. Provider Bull 2005 Aug; (PB 05-10):1-3. [3 references]

## **GUIDELINE STATUS**

This is the current release of the guideline.

This guideline updates a previous version: Washington Department of Labor and Industries, Washington State Medical Association. Guideline for the use of Neurontin in the management of neuropathic pain. Seattle (WA): Washington Department of Labor and Industries, Washington State Medical Association; 2002. 5 p.

## **COMPLETE SUMMARY CONTENT**

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## **SCOPE**

# DISEASE/CONDITION(S)

Neuropathic pain

**GUIDELINE CATEGORY** 

Management Treatment

CLINICAL SPECIALTY

Anesthesiology
Family Practice
Internal Medicine
Neurological Surgery
Neurology
Optometry
Orthopedic Surgery
Physical Medicine and Rehabilitation
Podiatry
Rheumatology

## INTENDED USERS

Advanced Practice Nurses Optometrists Physician Assistants Physicians Podiatrists

# GUIDELINE OBJECTIVE(S)

To provide guidance to treating physicians in the use of antiepileptic drugs in the management of neuropathic pain

## TARGET POPULATION

Injured workers with neuropathic pain

## INTERVENTIONS AND PRACTICES CONSIDERED

Antiepileptic drug therapy for chronic pain

## MAJOR OUTCOMES CONSIDERED

Pain relief

## METHODOLOGY

# METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

#### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The guideline developer performed literature searches of the U.S. National Library of Medicine's Medline database to identify data related to the injured worker population, and Drug Class Review on Antiepileptic Drugs in Bipolar Mood Disorder and Neuropathic Pain produced by Southern California Evidence-based Practice Center RAND, December 2005.

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Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Following input from community-based practicing physicians, the guideline was further refined.

# RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Currently, there is lack of evidence to demonstrate that antiepileptic drugs (AEDs) significantly reduce the level of acute pain, myofascial pain, low back pain, or other sources of somatic pain. The evidence of efficacy and safety on AEDs in the treatment of neuropathic pain varies and depends on the specific agent in this drug class.

Neuropathic pain may be defined as pain initiated or caused by a primary lesion or dysfunction in the nervous system, and is characterized by spontaneous pain described as lancinating, paroxysmal, burning, constant, cramping; and evoked pain of dysesthesia, allodynia, hyperalgia, or hyperpathia.

Gabapentin, along with older antiepileptic drugs, may be used as a first line therapy in the treatment of chronic neuropathic pain. Because evidence of efficacy with lamotrigine has been inconsistent and there is no evidence of efficacy and safety for levetiracetam, oxcarbazepine, tiagabine, topiramate, and zonisamide, these drugs will not routinely be covered by the department for the treatment of neuropathic pain. In addition, the Food and Drug Administration (FDA) has recently issued an alert strongly discouraging the off-label use of tiagabine due to a paradoxical occurrence of seizures in patients without epilepsy.

## Group 1, Neuropathic Pain Conditions

Gabapentin, and older antiepileptic drugs, are most likely to be effective when prescribed for the following neuropathic pain conditions or diseases that are known to cause neuropathy:

- Diabetic neuropathy
- Post herpetic neuralgia
- Trigeminal neuralgia
- Spinal cord injury
- Cauda equina syndrome
- Phantom limb pain
- Human immunodeficiency virus (HIV) neuropathy
- Cancer
- Traumatic nerve injury
- Chronic radiculopathy confirmed by pain radiating to the extremity in a dermatomal pattern and either objective examination findings of motor, sensory, or reflex changes, or abnormal imaging; or electromyography/nerve conduction velocity EMG/NCV abnormality.

## Group 2, Questionable Neuropathic Pain Conditions

Gabapentin is less likely to be effective for questionable neuropathic pain conditions with no objective finding of nerve injury. Use of gabapentin for questionable neuropathic pain conditions should be authorized only after consultation and recommendation from a physician specializing in pain therapies, rehabilitation and physical medicine, anesthesiology, or neurology. It is recommended that a physician specializing in pain therapies have a subspecialty certification in pain medicine from the American Board of Medical Specialties.

## Group 3, Non-Neuropathic Pain Conditions

There is no scientific evidence that antiepileptic drugs are effective in treating acute pain, somatic pain from strains or sprains, or myofascial pain. Gabapentin would not be authorized for non-neuropathic pain conditions such as:

- Acute musculoskeletal pain
- Primary somatic pain from chronic musculoskeletal strain/sprain
- Low back pain without radiculopathy
- Tendonitis
- Repetitive strain without evidence of entrapment neuropathy

## Recommended Dosing

Refer to the original guideline document for a recommended dosing plan for gabapentin (Neurontin®) in the management of neuropathic pain.

If pain level remains the same, discontinue gabapentin gradually over a one week period. Referral to a pain specialist may also be indicated if there is no improvement in pain level.

## CLINICAL ALGORITHM(S)

None provided

## EVIDENCE SUPPORTING THE RECOMMENDATIONS

## TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation. The guideline is based on a literature review of the current scientific information and on expert opinion from actively practicing physicians who regularly treat patients with this condition.

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

# POTENTIAL BENEFITS

- Appropriate physician prescribing of gabapentin or older antiepileptic drugs in injured workers
- Identification of injured workers with conditions most likely to respond to gabapentin or older antiepileptic drugs
- Alleviation or reduction of neuropathic pain in injured workers with conditions most likely to benefit from gabapentin or older antiepileptic drugs

## POTENTIAL HARMS

• The most common side effects associated with the use of gabapentin in adults are dizziness, somnolence, and peripheral edema. Accordingly, patients should be advised not to drive a car or operate other complex machinery until they have gauged whether or not gabapentin affects their mental and/or motor performance.

 Patients who require concomitant treatment with morphine may experience increases in gabapentin concentrations and should be observed for signs of central nervous system (CNS) depression and the dose of gabapentin or morphine should be adjusted appropriately.

## QUALIFYING STATEMENTS

#### **OUALIFYING STATEMENTS**

- The Office of the Medical Director works closely with the provider community to develop medical treatment guidelines on a wide range of topics relevant to injured workers. Guidelines cover areas such as lumbar fusion, indications for lumbar magnetic resonance imaging (MRI), and the prescribing of controlled substances. Although doctors are expected to be familiar with the guidelines and follow the recommendations, the department also understands that guidelines are not hard-and-fast rules. Good medical judgment is important in deciding how to use and interpret this information.
- The guideline is meant to be a gold standard for the majority of requests, but for the minority of workers who appear to fall outside of the guideline and whose complexity of clinical findings exceeds the specificity of the guideline, a further review by a specialty-matched physician is conducted.
- The guideline-setting process will be iterative, that is, although initial guidelines may be quite liberally constructed, subsequent tightening of the guideline would occur as other national guidelines are set, or other scientific evidence (e.g., from outcomes research) becomes available. This iterative process stands in contrast to the method in some states of placing guidelines in regulation. Although such regulation could aid in the dissemination and quality oversight of guidelines, flexibility in creating updated guidelines might be limited.

## IMPLEMENTATION OF THE GUIDELINE

## DESCRIPTION OF IMPLEMENTATION STRATEGY

This guideline is published in a provider bulletin which is mailed to all health care providers (e.g., physicians, osteopaths, physician assistants, nurse practitioners, pain clinics, and pharmacists) that have a provider number with the Washington State Department of Labor and Industries. Specialized training on the guideline is also given to all department claim managers.

# INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

## IDENTIFYING INFORMATION AND AVAILABILITY

# BIBLIOGRAPHIC SOURCE(S)

Washington State Department of Labor and Industries. Antiepileptic drugs guideline for chronic pain. Provider Bull 2005 Aug; (PB 05-10):1-3. [3 references]

#### **ADAPTATION**

Not applicable: The guideline was not adapted from another source.

## DATE RELEASED

2002 (revised 2005 Aug)

## GUI DELI NE DEVELOPER(S)

Washington State Department of Labor and Industries - State/Local Government Agency [U.S.]

## SOURCE(S) OF FUNDING

Washington State Department of Labor and Industries

## **GUI DELI NE COMMITTEE**

Washington State Department of Labor and Industries (L&I)

# COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Medical Director, Washington State Department of Labor and Industries (L&I): Gary Franklin, MD

## FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

## **GUIDELINE STATUS**

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This guideline updates a previous version: Washington Department of Labor and Industries, Washington State Medical Association. Guideline for the use of Neurontin in the management of neuropathic pain. Seattle (WA): Washington Department of Labor and Industries, Washington State Medical Association; 2002. 5 p.

# **GUIDELINE AVAILABILITY**

Electronic copies: Available in Portable Document Format (PDF) from the <u>Washington State Department of Labor and Industries Web site</u>.

Print copies: Available from the L&I Warehouse, Department of Labor and Industries, P.O. Box 44843, Olympia, Washington 98504-4843.

## AVAILABILITY OF COMPANION DOCUMENTS

None available

#### PATIENT RESOURCES

None available

## NGC STATUS

This NGC summary was completed by ECRI on March 14, 2003. The information was verified by the guideline developer on March 27, 2003. This NGC summary was updated by ECRI on January 16, 2006. The updated information was verified by the guideline developer on February 2, 2006.

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